AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-3. (cancelled)

4. (currently amended) [[The]] A loop diagnosis system for disk array apparatuses, ~~as claimed in Claim 3~~ comprising:

a recording unit having a plurality of loops for executing instructions from a host unit and a plurality of recording media;

a loop monitoring unit for detecting any abnormality in any of said loops; and

a loop controller for controlling said loops according to the result of monitoring by said loop monitoring unit, wherein

said loop controller, if said loop monitoring unit detects any abnormality in a specific loop, suspends the execution of any instruction in said specific loop, wherein:

said loop controller, after suspending the execution of said any instruction in said specific loop, substitutes another loop than said specific loop for further execution of said any instruction previously being done by said specific loop until the suspension, and

said loop controller, after substituting the execution of the instruction previously done by said specific loop, diagnoses said specific loop.

5. (original) The loop diagnosis system for disk array apparatuses, as claimed in Claim 4, wherein:

said loop controller, after diagnosing said specific loop, severs a specific one of said recording media from said specific loop.

6. (original) The loop diagnosis system for disk array apparatuses, as claimed in Claim 5, wherein:

said loop controller, after severing said recording medium from said specific loop, releases the execution of any instruction by said specific loop from suspension.

7. (original) The loop diagnosis system for disk array apparatuses, as claimed in Claim 6, further includes:

a maintenance terminal for entering information equivalent to the result of monitoring by said loop monitoring unit from elsewhere than said plurality of loops, wherein said loop controller controls said loops according to information entered into said maintenance terminal.

8. (original) The loop diagnosis system for disk array apparatuses, as claimed in Claim 7, wherein:

said maintenance terminal displays information extracted from said loop controller.

9-11. (cancelled)

12. (currently amended) [[The]] A loop diagnosis method applicable to a loop diagnosis system for disk array apparatuses having a plurality of loops for executing instructions from a host unit and a plurality of recording media, ~~as claimed in Claim 11~~, including the steps of:

a loop monitoring step to detect any abnormality in any of said loops; and

a loop control step to control said loops according to the result of monitoring at said loop monitoring step, wherein:

at said loop control step, if any abnormality in a specific loop is detected at said loop monitoring step, the execution of any instruction in said specific loop is suspended,

at said loop control step, after suspending the execution of any instruction in said specific loop, another loop than said specific loop is substituted for further execution of the any instruction previously being done by said specific loop until the suspension, and

at said loop control step, after substituting the execution of the instruction previously done by said specific loop, said specific loop is diagnosed.

13. (original) The loop diagnosis method for disk array apparatuses, as claimed in Claim 12, wherein:

at said loop control step, after diagnosing said specific loop, a specific one of said recording media is severed from said specific loop.

14. (original) The loop diagnosis method for disk array apparatuses, as claimed in Claim 13, wherein:

at said loop control step, after severing said recording medium from said specific loop, the execution of any instruction by said specific loop is released from suspension.

15. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 4, wherein,

said loop controller, after substituting the execution of the instruction previously done by said specific loop, diagnoses said specific loop by identifying a faulty one device out of a plurality of possibly faulty devices connected to said specific loop.

16. (new) The loop diagnosis method for disk array apparatuses, as claimed in Claim 12, wherein,

at said loop control step, after substituting the execution of the instruction previously done by said specific loop, said specific loop is diagnosed by identifying a faulty one

device out of a plurality of possibly faulty devices connected to said specific loop.

17. (new) A loop diagnosis system for disk array apparatuses, comprising:

a recording unit having a plurality of loops for executing instructions from a host unit and a plurality of recording media;

plural disks connected to each of the plural loops;

a loop monitoring unit for detecting an abnormality in any of said loops; and

a loop controller for controlling said loops according to the result of monitoring by said loop monitoring unit, wherein

said loop controller, if said loop monitoring unit detects an abnormality in a specific loop, suspends the execution of any instruction in said specific loop, wherein:

said loop controller, after suspending the execution of said any instruction in said specific loop, substitutes another loop for said specific loop for further execution of said any instruction previously being done by said specific loop until the suspension, and

said loop controller, after substituting the execution of the instruction previously done by said specific loop, diagnoses said specific loop to determining which one disk of plural said disks connected to said specific loop is suspected of having the detected abnormality.

18. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 17, wherein,

said loop controller diagnoses the one disk by issuing a group of commands for loop diagnosis of all the disks connected to said specific loop, and said commands analyzes the circumstances of the occurrence of the loop abnormality, and specifies said one disk suspected of having invited the abnormality.

19. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 18, wherein,

said loop controller, after diagnosing said specific loop, severs said one disk from said specific loop.

20. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 19, wherein,

said loop controller, after severing said one disk from said specific loop, releases the execution of any instruction by said specific loop from suspension.

21. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 20, further includes:

a maintenance terminal for entering information equivalent to the result of monitoring by said loop monitoring unit from elsewhere than said plurality of loops, wherein said

loop controller controls said loops according to information entered into said maintenance terminal.

22. (new) The loop diagnosis system for disk array apparatuses, as claimed in Claim 21, wherein:

said maintenance terminal displays information extracted from said loop controller.